Bruhat Bangalore Mahanagara Palike

Name of Work:-Developments of Roads and Drains at PDMS Premises (Police driving and Maintenance School) in ward No-01 of Yelahanka Sub division.

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Sl No	Description of Work	Unit	BOQ Quantity	Executed Qty	Nov-20	Dec-20	Jan-21
1	Removing and refixing stone slabs of drains and pointing in CM 1:3 P No-27 I No-5.33 KPWD SR 2018-19	Sqm	710.40	710.40			
2	KSRRB 300-1 Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications I No-19.1 P No-144	Cum	166.88	166.88			
3	Providing granite slabs of selected quality roughly dressed having a size of 7.5 cms thick and fixed in cement mortar 1:6 including fixing curing ete complete. P.No.27, I.No 5.31.1 of PW, P&IWTD SR 2018-19	Sqm	175.76	175.76			
4	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC at 240kgs with 20mm and down size graded granite metal coarse aggregates at 0.878 cum and fine aggregtes 0.53cum machine mixed, concrete laid in layers not exceeding 15 cms. thick well compacted in foundation plinth and cills including cost of all materials labour HOM curing complete as per specifications Specification No. KBS 4.1 4.2 P.No-13 I No-4 6	Cum	40.77	40.77			
5	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30 of PW, P&IWTD SR 2018-19)	Nos	4530.00	4530.00			
6	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces with materials labour complete as per specifications. MORTH Chapter 8 Specification No. KSRRB M800-6 P.No.180 I.No.24.1 of PW P&IWTD SR 2018-19	Sqm	713.48	713.48			
7	KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads transporting to site spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel murrum watering charges & compaction by vibratory roller to 95 of modified proctors density MORTH Specification No. 305 I No-19.60 P No-147 of PWD BCSR 2018-19	Cum	72.76	72.76			
8	KSRRB M300-14 Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes in accordance with requirements of lines grades and cross sections and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead I No-19.14 P No-143 KPWD SR 2018-19	Cum	581.42	581.42			

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15	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading premixed with bituminous binder and filler transporting the hot mix to work site laying with a paver finisher to the required grade level and alignment rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 507 of MORTH V revision as per IRC SP-53-2015 using 40-60 TPH capacity HMP with mechanical paver grading II 30-45mm with 5.4 of modified bituminus binder consisting of 4.97 of VG-30 bitumen 60 70 grade and 0.43 of plastomeric thermoplastics waste plastic P No171 I No21.78.12	Cum	269.01	269.01	
16	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)	Sqm	306.95	306.95	
17	Fabricating, providing and erecting in position Hot dip galvanised Gate. Using 72 X 72 X 4.0mm Sq GI Pipe Frame with Top pipe bending in heavy duty hydraulic press with sand packing and hot bending to form double arch as per drawing profile 20mm hot dip galvanised sq. rod for verticals at 150mm cc as shown in the drawing including providing hot dip galvanised forged ornamental design in between sq. rods and heads at top middle and bottom. Intermediate supports of 75X12 mm and 50X6 mm arch bend to hot dip galvanised flats. The work is inclusive of throughing GI flat GI sq rods placing, welding all the joints including grinding, finishing metal putty, painting two coats enamel painting. The rate is inclusive of all materials like GI sq pipe, GI sq rods GI forged designs etc heavy duty hinges are made out of 75mm solid sq block assembled with 20mm dia bearing in three places for each flop. Heavy Duty Locking arrangements at tow places including cost of labour painting erecting charges using hoist pulley cranes with all lead and lift, loading, transportation unloading, scaffolding charges and all other incidental charges for successful completion of the work as per directions of the Engineer in charge of the work	Sqm	13.56	13.56	
		Planned			
		Executed			

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9	KSRRB M600-1.Providing and Constructing dry lean cement concrete mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates at 0.58cum over a prepared sub base coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1 Aggregate gradation after blending to be as per Table 600-1 optimum moisture content to be determined during trial length construction concrete strength not to be less than 10 Mpa at 7 days mixed in a batching plant transported to site laid with a paver compacting with 8-10 tonnes vibratory roller finishing and curing complete as per specifications Clause 601of MORTH V Revision and IS 456 Table-5. with OPC at 150 kg cum and coarse aggregate 86cum fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum hr capacity with Slip form paver with electronic sensor. I No-22.1 P No-174	Cum	337.98	337.98	
10	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to(P.No-176,I No-22.6.1)	Cum	337.98	337.98	
11	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite trap basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site laying in uniform layers with paver in sub-base base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications P.No-155 I No-20.18	Cum	1345.04	1345.04	
12	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision P.No-158 I No-21.6	Sqm	8966.85	8966.85	
13	KSRRB 500-7. Providing and applying tack coat using 80 100 grade bitumen VG10 on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set excluding cleaning of road surface including cost of all materials labour HOM complete as per specifications P.No-161 I No-21.7	Sqm	8966.85	8966.85	
14	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40 60 TPH capacity H.M.P. with Mechanical paver Gr-II 50 mm to 75 mm with 4.5 VG 30 Bitumen P.No 160 I No-21 17 6	Cum	448.34	448.34	

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